REMARKS

Applicants thank the Examiner for the very thorough consideration given the present application. Claims 1-17 are now pending in the application. The Examiner is respectfully requested to reconsider and withdraw his rejections in view of the amendments and remarks as set forth below.

REJECTION UNDER 35 U.S.C. § 103

Claims 1-17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Peterson (U.S. Pat. No. 3,860,930) or Fitzpatrick (U.S. Pat. No. 4,635,067) in view of Murakoshi et al. (U.S. Pat. No. 5,517,204) and Sefton (U.S. Pat. No. 4,831,384). This rejection is respectfully traversed.

At the outset, Applicants have amended Independent Claims 1, 4, 7, and 9 to now include "wherein said platform is fixedly coupled to a rotary joint such that said main reflector rotates about said joint and about said azimuthal axis of rotation." As such, the antenna mounted on the platform rotates about an azimuthal axis of rotation on a fixed rotary point. Peterson '930 or Fitzpatrick '067 fail to teach or suggest a platform fixedly coupled to a rotary joint such that said main reflector rotates about a fixed point and about the azimuthal axis of rotation.

In contrast, Peterson '930 is generally directed to an antenna apparatus for increasing the antenna aperture size for an antenna system. Peterson generally discloses a ring gear meshed with a planetary gear, a central shaft coupled to the planetary gear, an arm attached to the central shaft, an antenna attached to the arm so that the antenna rotates with and about the center of the planetary gear, a second arm

where one end is attached to the central shaft and a second end is attached to a drive shaft, where the drive shaft is positioned to rotate about an axis collinear with the center of the ring gear. The second arm keeps the planetary gear meshed with the ring gear to translate the central shaft and antenna around the ring gear (Col 3, lines 1-11 and Figure 2) .

Fitzgerald '067 is generally directed to a retractable airborne radar pod that houses a radar scanner. Fitzgerald '067 generally discloses a radar dish mounted for rotation about a vertical axis in a (non-rotating) radome, flexible plastic diaphragms that cover sides of the radome that are cut away, wherein the radome is mounted on a pylon and deployed by means of a linkage. As such, when deployed, the radome is pressurized to inflate the diaphragms so that the radar aerial may be rotated about the vertical axis to sweep the volume (Col. 4, lines 1-12 and Figures 6a-6d).

Applicants submit that both the Peterson '930 and Fitzgerald '067 references are different than the claimed invention, in such, that they both provide structural differences in mounting the reflector and rotating the reflector about an azimuthal axis of rotation. Specifically, Peterson '930 appears to be directed to a mechanism for rotating the antenna. The antenna in Peterson '930 translates around a ring gear that is meshed with a planetary gear. Basically, the point of rotation in the Peterson '930 reference is not fixed as claimed in the present invention; rather, the antenna translates around a ring gear having a moving point of rotation. As for the Fitzgerald '067 reference, Fitzgerald '067 discloses that the radome in which the radar dish is mounted on does not rotate. The radome needs to be pressurized to inflate diaphragms so that the dish may rotate about a vertical axis. The claimed invention provides that the platform on

which the main reflector is mounted on is able to rotate about the azimuthal axis of rotation, wherein the platform is coupled to a rotary joint such that the main reflector rotates about the rotary joint and about the azimuthal axis of rotation, but does not translate about an arc. This provides for a simpler mechanical mounting arrangement that still accomplishes the needed function of minimizing the swept arc of the antenna.

Accordingly, Applicants respectfully request reconsideration and withdrawal of this rejection.

Applicants note that claims 2-3, 5-6, 8, and 10-17 depend from independent claims 1, 4, 7, and 9 which are now believed to be patentable and in condition for allowance. Accordingly, Applicants respectfully request reconsideration and withdrawal of this rejection.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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